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a plurality of functionalized non-linear nanotubes attached to and extending from said attachment surface, whereby said microfastener can be joined to another element including extending nanotubes without requiring the degradation of said nanotubes.

14. (Amended) A method of manufacturing a microfastener comprising the steps of:

- Not entered*
- a) providing a substrate having an attachment surface;
  - b) introducing a plurality of open ended nanotubes to said substrate whereby said nanotubes are attracted to said attachment surface and become affixed thereto, whereby said microfastener can be joined to another element including extending nanotubes without requiring the degradation of said nanotubes.

Please add Claims 24-43 as follows:

- Not entered*
24. (New) A microfastening system comprising:
- a first fastening element including a plurality of extending nanotubes; and
  - a second fastening element including a plurality of extending nanotubes, wherein said nanotubes of at least one of said fastening elements are selectively deformable;

whereby upon joining said first and second fastening elements, the extending nanotubes from each element become mechanically interconnected.

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25. (New) The microfastening system of Claim 24 wherein said at least one of first and second fastening elements further comprise a substrate from which said nanotubes extend.

26. (New) The microfastening system of Claim 25 wherein said substrate is formed from materials selected from the group consisting of metals, carbon, silicon, germanium, polymers and composites thereof.

27. (New) The microfastening system of Claim 24 wherein said nanotubes are at least partially multi-walled.

28. (New) The microfastening system of Claim 24 wherein the nanotubes are functionalized to a non-linear shape.

29. (New) The microfastening system of Claim 28 wherein the non-linear nanotubes of said fastening element are selected from hooks, loops, spirals and combinations thereof.

30. (New) The microfastening system of Claim 24 wherein said fastening elements are reusable.

31. (New) A microfastener comprising:  
a substrate including an attachment surface; and

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a plurality of functionalized selectively deformable non-linear nanotubes attached to and extending from said attachment surface.

32. (New) The microfastener of Claim 31 wherein said substrate is formed from materials selected from the group consisting of metals, carbon, silicon, germanium, polymers and composites thereof.

33. (New) The microfastener of Claim 31 wherein said nanotubes are at least partially multi-walled.

34. (New) The microfastener of Claim 31 wherein the non-linear nanotubes of said fastening element are selected from hooks, loops, spirals and combinations thereof.

35. (New) A method of manufacturing a microfastener comprising the steps of:

- a) providing a substrate having an attachment surface;
- b) introducing a plurality of open ended selectively deformable non-linear nanotubes to said substrate whereby said nanotubes are attracted to said attachment surface and become affixed thereto.

36. (New) The method of Claim 35 wherein said nanotubes are functionalized prior to attaching to said substrate.

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37. (New) The method of Claim 35 wherein said nanotubes are functionalized during attachment to said substrate.

38. (New) The method of Claim 35 wherein said nanotubes are functionalized after attachment to said substrate.

39. (New) The method of Claim 35 wherein said substrate is formed from materials selected from the group consisting of metals, carbon, silicon, germanium, polymers and composites thereof.

40. (New) The method of Claim 35 wherein said nanotubes are at least partially multi-walled.

41. (New) The method of Claim 35 wherein the non-linear nanotubes of said microfastener are selected from hooks, loops, spirals and combinations thereof.

42. (New) The method of Claim 35 wherein said nanotubes are attached to said substrate in the presence of an electric field.

43. (New) The method of Claim 35 wherein said microfastener is reusable.